e eighth inch = one foot 4 8 16 16 18 18 18 18 18 18 18	one quarter inch = one foot	three eighths inch = one foot	one half inch = one foot	three quarters inch = one foot 6** 0 2	one inch = one foot 6" 0 2	one and one half inches = one foot three in the second sec	inches = one foot 6"
ISSUED FOR REBID FINAL CD-SUBMISSION 95% SUBMISSION 65% SUBMISSION	NOTES: 1. CORRECT 2. SEE DW	330 331 331 332 335	322 323 324 325 326 328 329	315 316 317 318 319 320 321 321A	309 310 311 312 313 315	290 294 297 303 305 306 308	STEAM TRAP TAO NO. 286 288
05-23-13 12-21-12 11-30-12 11-16-12	ECT PIPING AS NOTED IN REMARKS COLUMN. VG. 4-01 FOR DETAIL OF STEAM SEPARATOR.	STAIRWELL #5 MAIN PENTHOUSE IFB STEAM COI SUPPLY DRIP AC-18S STAIRWELL #5 MAIN PENTHOUSE IFB STEAM COI SUPPLY DRIP AC-18S INSIDE AHU STAIRWELL #5 MAIN PENTHOUSE IFB STEAM COI SUPPLY DRIP AC-18N INSIDE AHU STAIRWELL #5 MAIN PENTHOUSE HUMIDIFIER MANIFOLD DRIP AC18 INSIDE AHU STAIRWELL #5 MAIN PENTHOUSE HUMIDIFIER MANIFOLD INSIDE AHU-17 INSIDE AHU.	NT K07 CART WASHER HEAT EXCHANG NT K05 EQUIPMENT RM. CASTLE MLC 3 ER NT K05 EQUIPMENT RM. CASTLE MLC 3 ER IT K05 EQUIPMENT RM. CASTLE MODE ERILIZER IT K05 EQUIPMENT RM. CASTLE MODE ERILIZER IT K-14 CART WASHER HEAT EXCHANG LL #5 MAIN PENTHOUSE UNIT HEATER	THOUSE AC-25 UNIT HEAT 2041 FAN ROOM AC-15 SUF 2041 AT HALLWAY DOOR B 2004 AHU-14 STEAM COIL 2004 AHU-14 STEAM COIL RWELL #1 EQUIPMENT RN STEAM PRV AT WALL 4-102 (BETWEEN K102 & K1 ZER	1ST FL.MECH. RM. 107 HUMIDIFIER MANIFOLD DR 1ST FL.MECH. RM. 107 GLYCOL HEAT EXCHANGE 1C1A 1ST FL. MECH. RM. 107 GLYCOL HEAT EXCHANGE 1C3 - 2C 2ND FLOOR 2C-2041 FAN ROOM DRIP ABOVE ENTRANCE RESEARCH PENTHOUSE 3440A-25 STEAM COIL A UPPER COIL RE-HEAT BACK SIDE RESEARCH PENTHOUSE 3440A-25 STEAM COIL A UPPER COIL RE-HEAT BACK SIDE RESEARCH PENTHOUSE 3440-A L.P. AC-25 END C	MECH. ROOM #D-20 AC-2 STEAM COIL MECH. RM. D-20 NEW CHILLED WATER CORRIDO E.O.M. MECH. RM. D-20 DRIP TRAP MECH. RM. BE-260 HVAC-32 AC-4 HUMIDIFIER DR (INSIDE UNIT) MECH. RM. BE-260 HVAC-32 AC-4 HUMIDIFIER DR (INSIDE UNIT) MECH. RM. BE-260 PUMPING TRAP AC-35 STEAM COIL MECH. RM. 02 PRV DRIP BY DUCT AT WALL ABOV TRAP #46 1ST FL. MECH. RM. 107 L.P. DRIP ABOVE PUMPS I 1SF2 AHU 1ST FL. MECH. RM. 107 1SF2 AHU HUMIDIFIER	MECH. ROOM #D-20 AC-3 PRE-HEAT STEAM COIL MECH. ROOM #D-20 AC-12 STEAM COIL MECH. ROOM #D-20 AC-2 STEAM SUPPLY DRIP
FREDRICK, FREDRICK & HE ENGINEERS, INC. 672 EAST ROYALTON ROAD BROADVIEW HTS., OHIO 44147 TEL (440) 546-9696 FAX: (440) 546-9696		3-PH-2 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3-B-1 1 1 1 3-B-1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	3-2-8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	4 4 4 0 0 0	3-B-1 1 1 1	SYSTEM, INSU WING E NO. AREA
HELLER 3. DAD 44147		B 20 3/4" SPIRAX B1H-125 B 20 3/4" SPIRAX B1H-125 B 8 3/4" ARMSTRONG 880 B 8 3/4" PROFICIENT TECHNOLOGIES TGGA O 4 TECHNOLOGIES TGGA	3/4" SPIRAX B1H-12 3/4" SPIRAX B1H-12 1/2" WATSON MCD. 1/2" WATSON MCD. 1/2" SPIRAX TS25A 1/2" SPIRAX B1H-12 3/4" WATSON WD-6 3/4" SPIRAX FT-15	12 3/4" SPIR 12 3/4" SPIR 10 3/4" SPIR 10 3/4" PRO TECHNO 2 1" WATS0 6 3/4" NICH 6 1/2" NICH	1 3/4" SPIRA) 3 2" SPIRA) 4 2" SPIRA) 9 1/2" SPIRA) 2 1 1/2" SPIR 2 1 1/2" SPIR	1 1 1/2" ARMSTRONG 15- 12 3/4" NICHOLSON FTN-3 2 3/4" SPIRAX FT-30 1 1" B&J 40215-4 1 1" SPIRAX PPEC 12 3/4" SPIRAX B1H-125 8 3/4" SPIRAX B1H-125 5 3/4" SPIRAX B1H-125	
BRIAN WIDOWSKI 66625	COLUMN REFERENCE NOTES: ① FURNISH AND INSTALL AN AG ② REPLACE OR REPAIR STEAM ③ REMOVE STEAM TRAP AND AG ④ REPAIR STEAM TRAPS: REPAITHAT WERE FOUND TO BE COLD. NO. 1. ⑥ REPLACE THE EXISTING COPWORK. SEE THE SPECIFICATION: ⑦ FURNISH AND INSTALL NEW (1)	10 STEAM MAIN OK DRIP 10 STEAM MAIN LK DRIP 10 STEAM MAIN OK DRIP DRIP DRIP MANIFOLD CO DRIP MANIFOLD CO DRIP MANIFOLD CO DRIP MANIFOLD CO	70M EXCHANGER OK STEAM MAIN OK TT125A 70 STERILIZER OK TT125A 70 STERILIZER OK TT125A 70 STERILIZER OK 00 60M STERILIZER OK	14 DRIP TRAP 14 UNIT HEATER 10 STEAM MAIN DRIP 10 STEAM MAIN DRIP 10 STEAM MAIN DRIP 50 STERILIZER	10 HUMIDIFIER CO DRIP 10M HEAT EXCHANGER 10M EXCHANGER OK/LK 114M STEAM COIL OK/LK 14M STEAM COIL OK/LK OK/LK	B6 15M STEAM COIL CO 25 STEAM MAIN OK 25 DRIP TRAP OK 16 HUMIDIFIER CO 10 PUMPING TRAP OK/L 20 DRIP TRAP OK/L 10 DRIP TRAP OK/L 10 DRIP TRAP OK/L 10 DRIP TRAP OK/L 10 DRIP TRAP OK/L	EQUIPMENT SERVED C STEAM MAIN DRIP STEAM MAIN DRIP
ARCHITECT:	OUSTIC WIRELESS STEAM TRAP MONITORING SENSOR PER SPECIFICATIONS. TRAP IN ACCORDANCE WITH DESCRIPTION IN REMARKS COLUMN. LL ABANDONED CONDENSATE PIPING TO A POINT WHERE THE CONDENSATE LINE IS LIVE. CAP. ELEAK IN ACCORCANCE WITH DESCRIPTION IN REMARKS COLUMN. THE VALVES, CONTROLS ETC. AS DESCRIBED IN THE REMARKS COLUMN. INVESTIGATE AND DETERMINE THE REASON FOR ANY OTHER NON-FUNCTIONING STEAM TRAP FIX ALL ITEMS FOUND TO BE NEEDING REPAIR. (FOR PURPOSES OF THIS BID ASSUME THE CONTROL VALVES REQUIRE REPAIR OR REPLACEMENT.) DEDUCT ALTERNATE PER PIPING WITH NEW STEEL PIPE AND REPLACE THE EXISTING DIELECTRIC UNIONS AND NIPPLES WITH EQUIVALENT SIZES. SEE THE REMARKS COLUMN FOR REQUIRED FOR THE REQUIRED MATERIALS AND FITTINGS. INSULATE ALL NEW & EXISTING BARE PIPE. DEDUCT ALTERNATE NO. 2. TEAM VACUUM BREAKERS IN ACCORDANCE WITH THE REMARKS COLUMN.	STEAM TRAP IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #80004 REPAIR KIT. INSPECTED 7/31/12. (NEW TRAP) REPAIR DEFECTIVE STEAM TRAP WITH SPIRAX #80004 REPAIR KIT. INSPECTED 7/31/12. STEAM TRAP OK, WHEN WORN, REPAIR WITH ARMSTRONG #880 PCA REPAIR KIT, 1/8" ORIFICE AND BODY GASKET. STEAM TRAP INSTALLED INSIDE AC18, SHOULD RELOCATE OUTSIDE UNIT FOR EASE OF MAINT. INSPECTED 7/31/12. STEAM TRAP IS COLD OUT OF SERVICE, WHEN WORN, REPAIR WITH ARMSTRONG #880 PCA REPAIR KIT, 1/8" ORIFICE AND BODY GASKET. STEAM TRAP IS COLD OUT OF SERVICE, POSSIBLY NOT IN USE. IF REQUIRED, REPLACE WITH 3/4" SPIRAX B1H-125 OR 3/4" ARMSTRONG #811-125 INVERTED BUCKET STEAM TRAP. STEAM TRAP INSTALLED INSIDE AC18, SHOULD RELOCATE OUTSIDE UNIT FOR EASE OF MAINT. INSPECTED 7/31/12. STEAM TRAP IS COLD OUT OF SERVICE, POSSIBLY NOT IN USE. IF REQUIRED, REPLACE WITH 3/4" SPIRAX B1H-125 OR 3/4" ARMSTRONG #811-125 INVERTED BUCKET STEAM TRAP. STEAM TRAP INSTALLED INSIDE AC17, SHOULD RELOCATE OUTSIDE UNIT FOR EASE OF MAINT. INSPECTED 7/31/12.	STEAM TRAP IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #80004 REPAIR KIT. INSPECTED 8/1/12. STEAM TRAP IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #80004 REPAIR KIT. INSPECTED 8/1/12. STEAM TRAP IS OK, SHOWS SOME WEAR. WHEN WORN, REPAIR WITH TUNSTALL #TCWM-TT125-REA STEAM TRAP CAPSULE REPAIR KIT WITH NEW COVER AND GASKET. COMPLAINT OF WET STEAM SHOULD INSTALL 1* VERTICAL SEPARATOR WITH COALESCER FILTER IN STEAM SUPPLY LINE. INSPECTED 8/1/12. STEAM TRAP IS OK, SHOWS SOME WEAR. WHEN WORN, REPAIR WITH TUNSTALL 1* VERTICAL SEPARATOR WITH COALESCER FILTER IN STEAM SUPPLY LINE. INSPECTED 8/1/12. STEAM TRAP IS OK, SHOWS SOME WEAR. WHEN WORN, REPAIR WITH TUNSTALL 1* VERTICAL SEPARATOR WITH COALESCER FILTER IN STEAM SUPPLY LINE. INSPECTED 8/1/12. STEAM TRAP OK, WHEN WORN, REPLACE STEAM TRAP WITH 1/2* TUNSTALL 1* VERTICAL SEPARATOR WITH COALESCER FILTER IN STEAM SUPPLY LINE. INSPECTED 8/1/12. STEAM TRAP IS OK, (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #80004 REPAIR KIT. 6 FT OF 3/4* BARE 70 PSIG STEAM PIPE NEEDS INSULATION. INSPECTED 8/1/12. STEAM TRAP IS OK, WHEN WORN, REPLACE WITH NEW 3/4* SPIRAX B11+125 OR ARMSTRONG 3/4* B11-125 INVERTED BUCKET TRAP. NO VACUUM BREAKER, SHOULD INSTALL INSTALL TUNSTALL VB-3/4 STEAM SERVICE VACUUM BREAKER. INSPECTED 8/1/12. STEAM TRAP OK, WHEN WORN, REPAIR STEAM TRAP WITH TUNSTALL #1FP-SA-15 FACE PLATE REPAIR KIT. INSPECTED 7/31/12. X X X X X X X X X X X X X	MHEN WORN, REPAIR WITH TUNSTALL #1FP-SA-30 FACE PLATE REPAIR KIT. INSPECTED 7/26/12. WHEN WORN, REPAIR WITH TUNSTALL #1FP-SA-30 FACE PLATE REPAIR KIT. INSPECTED 7/27/12. X X X X X X X X X X X X X	STEAM TRAP IS COLD OUT OF SERVICE. (NEW TRAP) IF REQUIRED TIZ6/12. STEAM TRAP IS OK. WHEN WORN, REPAIR STEAM TRAP WITH VS-204 AND SWING CHECK IN REVERSE IN SHELL AS VACUUM TUNSTALL VB-1/2 STEAM SERVICE VACUUM BREAKER. INSPEC STEAM TRAP IS OK. WHEN WORN, REPAIR STEAM TRAP WITH VS-204 AND SWING CHECK IN REVERSE IN SHELL AS VACUUM INSPECTED 7/26/12. STEAM TRAP IS COLD OUT OF SERVICE. IF REQUIRED, REPLACE BUCKET STEAM TRAP. INSPECTED 7/26/12. STEAM TRAP OK. WHEN WORN REPAIR STEAM TRAP WITH TUN RETURN, LEAKS STEAM. SHOULD REPLACE WITH TUNSTALL V MUST BE TURNED OFF TO GET TO THE BACK OF THE UNIT). INSPECTOR IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM STEAM. SHOULD REPLACE WITH TUNSTALL V MUST BE TURNED OFF TO GET TO THE BACK OF THE UNIT). INSPECTOR IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM INSPECTOR. INSPECTOR IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM INSPECTOR.	REMOVED DISCONNECTED FOR NEW CONSTRUCTION. INSPECTED 7/25/12. STEAM TRAP IS OK), WHEN WORN, REPAIR WITH TUNSTALL #1FP-SA-30 FACE PLATE REPAIR KIT. INSPECTED 7/25/12. X STEAM TRAP IS OK, WHEN WORN, REPAIR WITH TUNSTALL #1FP-SA-30 FACE PLATE REPAIR KIT. ELEVATED CONDENSATE. 2 FT. OF 3/4" BARE 25 PSIG STEAM PIPE BY-PASS LINE SHOULD BE INSULATED FOR SAFETY. INSPECTED 7/25/12 STEAM TRAP IS COLD OUT OF SERVICE. STEAM TRAP IS TILTED, SHOULD STRAIGHTEN. WHEN WORN, REPAIR WITH TUNSTALL #2FP-DB-15 FACE PLATE REPAIR KIT. SHOULD RELOCATE STEAM TRAP IS TILTED, SHOULD STRAIGHTEN. WHEN WORN, REPAIR WITH TUNSTALL #2FP-DB-15 FACE PLATE REPAIR KIT. SHOULD RELOCATE STEAM TRAP IS TILTED, SHOULD STRAIGHTEN. WHEN WORN, REPAIR WITH TUNSTALL #2FP-DB-15 FACE PLATE REPAIR KIT. SHOULD RELOCATE STEAM TRAP OUTSIDE OF AHU FOR EASE OF MAINTENANCE. POSSIBLE BAD CONTROL VALVE. INSPECTED 7/26/12. STEAM TRAP IS COLD OUT OF SERVICE. STEAM TRAP OUTSIDE OF AHU FOR EASE OF MAINTENANCE. POSSIBLE BAD CONTROL VALVE. INSPECTED 7/26/12. STEAM TRAP IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #30004 REPAIR KIT. INSPECTED 7/26/12. STEAM TRAP IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #30004 REPAIR KIT. INSPECTED 7/26/12. X STEAM TRAP IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #30004 REPAIR KIT. INSPECTED 7/26/12. X STEAM TRAP IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #30004 REPAIR KIT. INSPECTED 7/26/12. X STEAM TRAP IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #30004 REPAIR KIT. INSPECTED 7/26/12. X X STEAM TRAP IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #30004 REPAIR KIT. INSPECTED 7/26/12. X X STEAM TRAP IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #30004 REPAIR KIT. INSPECTED 7/26/12. X	D REMARKS REMARKS REMARKS REMARKS REMARKS REMARKS NO WORK TRAP OK. WHEN WORN, REPAIR WITH TUNSTALL #3FP-SA-15 FACE PLATE REPAIR KIT. EXISTING VACUUM BREAKER TIED INTO CONDENSATE LINE, INSTALL TUNSTALL 3/4" STEAM SERVICE VACUUM BREAKER OPEN TO ATMOSPHERE. INSPECTED 7/25/12. STEAM TRAP IS OK. (NEW TRAP) WHEN WORN, REPAIR STEAM TRAP WITH SPIRAX #80004 REPAIR KIT. INSPECTED 7/25/12. STEAM TRAP IS OK, BUT SHOWS SOME WEAR, WHEN WORN, REPAIR WITH TUNSTALL #3FP-SA-15 FACE PLATE REPAIR KIT. REMOVE HOFFMAN #79 WATER AIR VENT. INSPECTED 7/25/12. REPAIR DEFECTIVE (NEW TRAP) WITH SPIRAX #80004 REPAIR KIT. INSPECTED 7/25/12.
STEAM TRAP AND WORK SCHEDULE TRAPS 286-335 Approved: Project Director	 ® FURNISH AND INSTALL NEW Y-STRAINERS BETWEEN SHUT-OFF VALVE AND INL ® REPIPE ELEVATED CONDENSATE PIPING AT LOCATIONS NOTED. SEE DETAILS ® NO WORK REQUIRED ® NO WORK REQUIRED ® NO WORK REQUIRED ® MISCELLANEOUS 				× ×		TRAP REMOVE REPAIR STEAM/ STEAM/ STEAM/ STEAM/ PIPING CONDENSATE TRAP UNIONS DEDUCT ALT NO. 2
Project Title STEAM TRAP MONITORING, INSULATION AND PIPING UPGRADES Location VAMC - WADE PARK Date 12-21-12 Checked Drawn Drawn Drawn Drawn Drawn Drawn Drawn Drawn Drawn Drawn	_ET TO STEAM TRAP. ON DRAWINGS {3-PH-4 4-02 4-03 4-04 4-05 }						SERVICE VACUUM STRAINER CONDENSATE PIPE PIPE TRAPS TO OUTSIDE AHU
ject Number 541-12-115 Office ding Number 1 Manage Wing Number 2-08 Manage		*					TE REMOVABLE HARD PIPE INSULATION JACKETS
ffice of acilities agement legartment of Veterans Affairs			NOTE 2		NOTE 1	<u> </u>	MISC.